

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An oscillator comprising:

a dielectric substrate having a microstrip-line resonator and a coupling line coupled with the microstrip-line resonator formed thereon, the dielectric substrate having a relative permittivity of more than 20;

an active device connected to the coupling line and constituting an oscillating circuit together with the microstrip-line resonator; and

a package substrate on which the dielectric substrate is mounted and which has a smaller dielectric constant than the dielectric substrate,

wherein the active device is mounted on the package substrate.

2. (Original) An oscillator according to Claim 1, further comprising a frequency-variable device mounted on the package substrate and connected to a said oscillating circuit.

3. (Currently Amended) An oscillator comprising:

a dielectric substrate having a microstrip-line resonator and a coupling line coupled with the microstrip-line resonator formed thereon, the dielectric substrate having a relative permittivity of more than 20;

an active device connected to the coupling line and constituting an oscillating circuit together with the microstrip-line resonator; and

a package substrate on which the dielectric substrate is mounted and which has a smaller dielectric constant than the dielectric substrate,

wherein the active device is mounted on the dielectric substrate.

4. (Original) An oscillator according to Claim 3, further comprising a frequency-variable device mounted on the dielectric substrate and connected to said oscillating circuit.

5. (Previously Amended) An oscillator according to one of Claims 1 and 3, further comprising a bias line and a bias resistor both for applying a bias voltage to the active device which are formed on the dielectric substrate.

6. (Previously Amended) An oscillator according to one of Claims 1 and 3, wherein the microstrip-line resonator and the coupling line are formed at the same time.

7. – 10. (Cancelled)

11. (Original) An oscillator according to Claim 1 or Claim 3, wherein the dielectric substrate is mounted on the package substrate by die bonding.

12. (Original) An oscillator according to Claim 11, wherein the dielectric substrate and the package substrate are electrically connected by wire bonding.

13. (Original) An oscillator according to Claim 1 or Claim 3, wherein the dielectric substrate is mounted on the package substrate by flip-chip mounting.

14. (Cancelled)

15. (Cancelled)

16. (Currently Amended) An oscillator ~~according to Claim 1 or Claim 3~~,
comprising:

a dielectric substrate having a microstrip-line resonator and a coupling line
coupled with the microstrip-line resonator formed thereon an active device connected to
the coupling line and constituting an oscillating circuit together with the microstrip-line
resonator;

a package substrate on which the dielectric substrate is mounted and which has
a smaller dielectric constant than the dielectric substrate,

wherein the active device is mounted on the package substrate; and

wherein the temperature characteristic of the dielectric substrate is specified
such that the temperature drift of the resonant frequency of the microstrip-line resonator is
within 0.1% of the resonant frequency in a temperature range of 0°C to 70°C.

17. – 19. (Cancelled)

20. (Original) An electronic apparatus comprising a communications circuit
including at least one of a transmission circuit and a reception circuit, said
communications circuit including an oscillator according to Claim 1 or Claim 3.

21. (New) An oscillator comprising:

a dielectric substrate having a microstrip-line resonator and a coupling line
coupled with the microstrip-line resonator formed thereon an active device connected to
the coupling line and constituting an oscillating circuit together with the microstrip-line
resonator; and

a package substrate on which the dielectric substrate is mounted and which has
a smaller dielectric constant than the dielectric substrate,

wherein the active device is mounted on the package substrate; and
wherein the temperature characteristic of the dielectric substrate is specified
such that the temperature drift of the resonant frequency of the microstrip-line resonator is
within 0.1% of the resonant frequency in a temperature range of 0°C to 70°C.